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Students from 13 high schools display "space" projects

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KIRTLAND AFB, N.M. – Students from 13 regioinal high schools, including the first from out of state, demonstrated their research projects developed during a yearlong Air Force Research Laboratory sponsored educational outreach program on April 24.

Student rocketeers from Fredericksburg High School, Fredericksburg, Texas, were the first from an out-of-state high school to participate in the laboratory's Students Planning And Conducting Engineering (SPACE) Project, a program that provides educational and real-world research experiences to high schoolers.

Members from 15 teams briefed and demonstrated their projects to a panel of government and private sector mentors at the ninth SPACE Symposium. Mentors reviewed the projects and offered suggestions as how to improve the projects following each team's presentation.

"The goal of the program is to provide a real world experience to students who have varying understanding of science and technology," explained Gerald Mora, program manager with the laboratory's Office of Technology Transfer for Education. He noted that the program had grown from two schools to more than 200 students from 13 schools this year.

STUDENT ROCKETEERS – Mentor Dr. Ty Martinez, left, research physicist with the Air Force Research Laboratory's Directed Energy Directorate, Surveillance Technologies Branch and James Kwan, right, Rio Rancho High School junior observe James Kassemi, a junior, align the set up for the school's Laser Communications and Applied Holographic Aberration Correction project during the ninth Students Planning And Conducting Engineer Symposium held here. Approximately 200 students from 13 high schools participated in this year's laboratory's educational outreach program. (USAF photo by Conrad E. Dziewulski)

The Texas high schoolers briefed the results of the Aerospace Program that culminated in a rocket launched to an altitude of 36,000 feet last August 4 at the U. S. Army's White Sands Missile Range.

"A major goal of the school's aerospace program is to expose students to university level research and not simply launch rockets," explained Brett Williams, program director and an aeroscience and drafting teacher at the central Texas school.

He added that last summer's flight of Redbird 9H was to launch a high altitude communications platform for the University of Texas, Austin. Although it failed to reach its objective, due to a rocket nozzle malfunction, the students are already working on another research project with Purdue University, West Lafayette, Ind.

Other projects presented included a computerized facial recognition system, using holograms to improve laser communications and an aerodynamics study of a superior sport truck.

Approximately 50 mentors from government and the private sector guided the students with their projects. The program began with teams developing, designing and building their projects through the school year.

New Mexico was represented by the following schools: Bernalillo High School, Career Enrichment Center, Eldorado High School, Highland High School, Hope Christian School, La Cueva High School, Manzano High School, Rio Ranch High School, Sandia Preparatory School, St. Pius X High School, Valley High School, and West Mesa High School. @